

FIGURE 1A

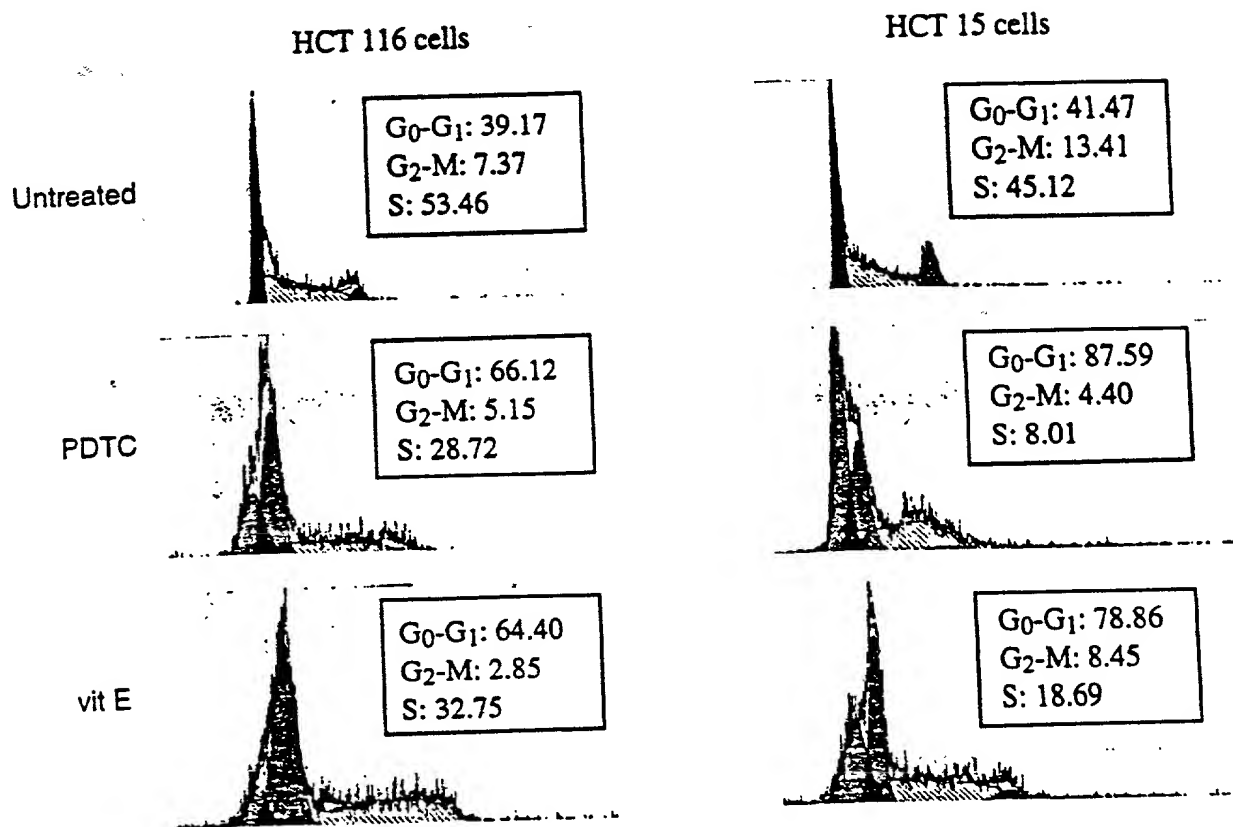


FIGURE 1B

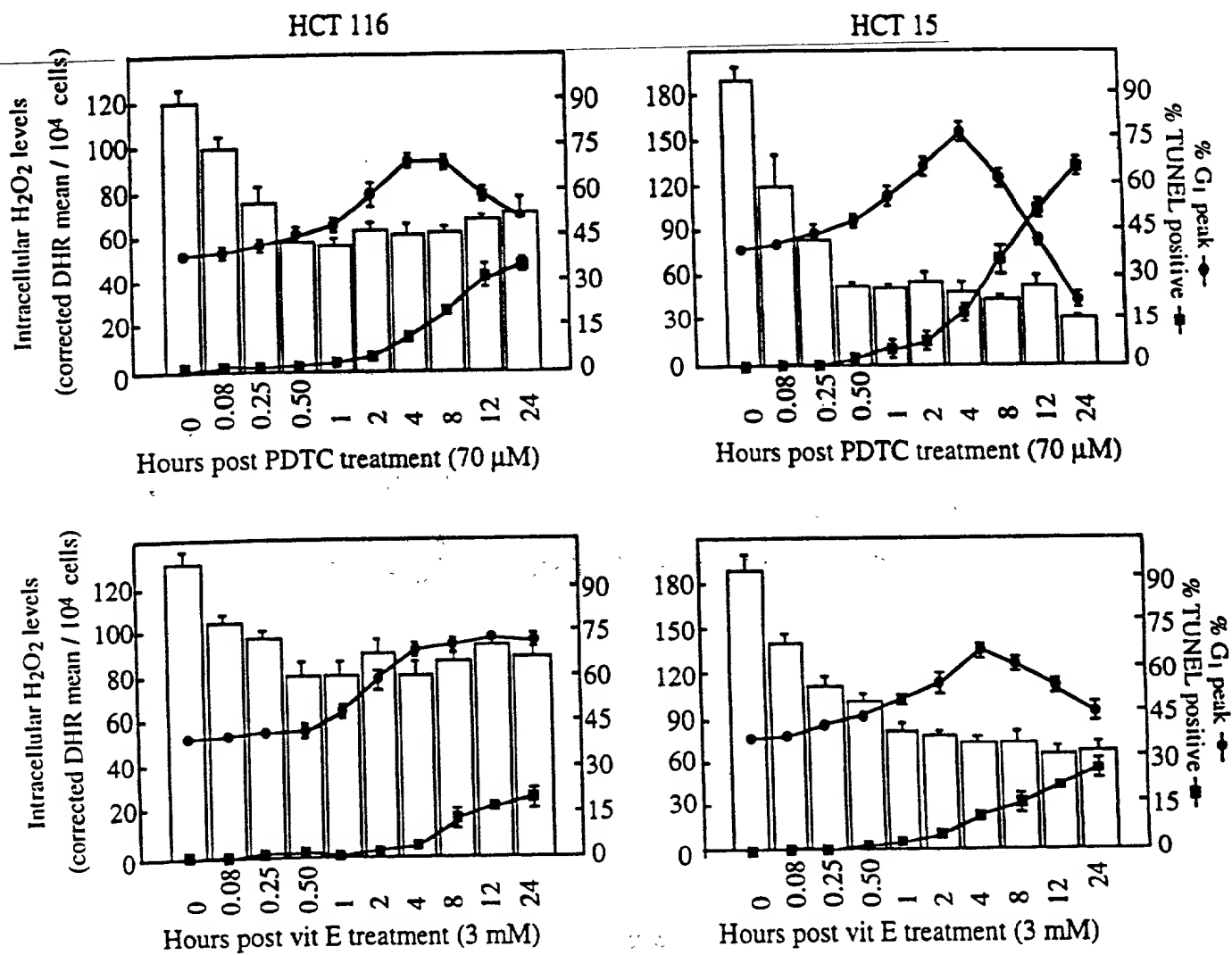


FIGURE 1C

Figure 1D

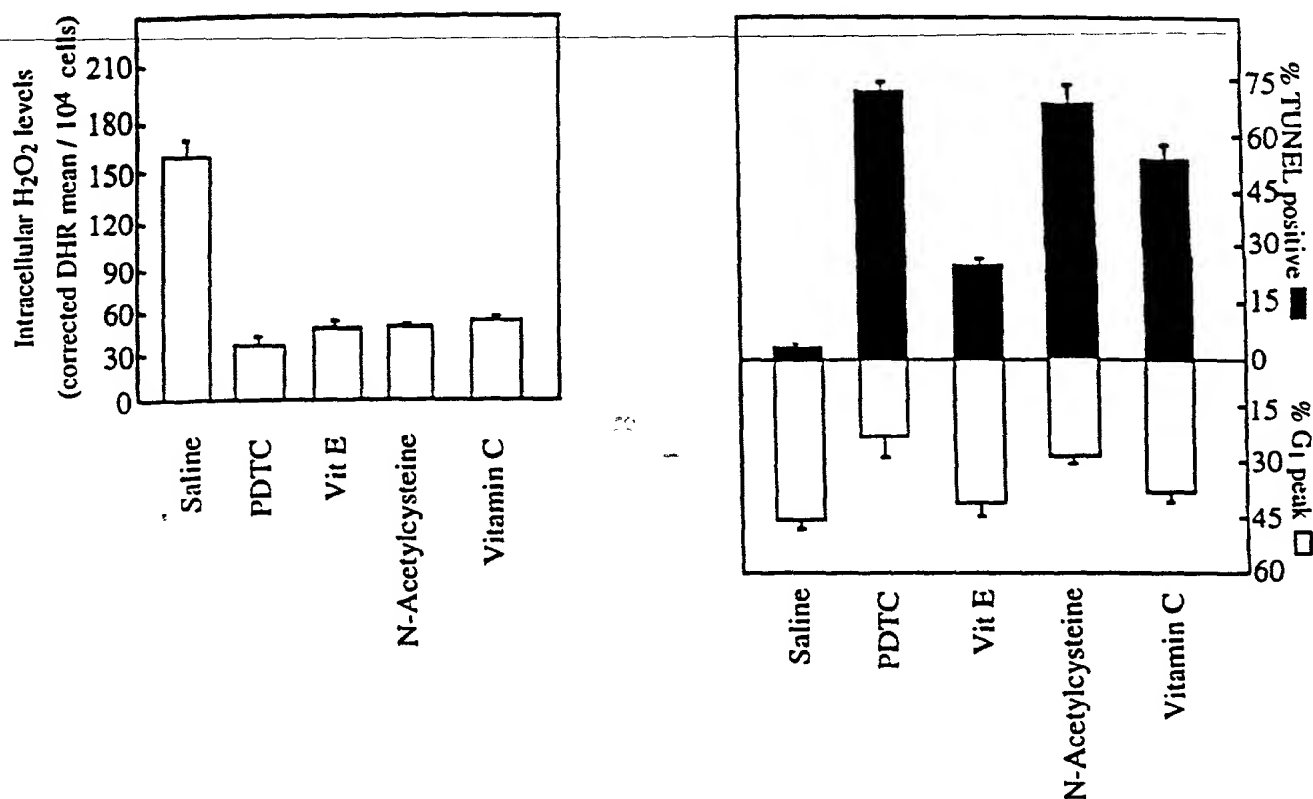


Figure 1E

Sensitization of HCT 116 and HCT 15 colon cancer cells to chemotherapeutic agents by PDTC (70 μ M) or vitamin E (3 mM)

Cell line	Drug	IC ₅₀ (μ M) ^a		
		- Antioxidant	+PDTC	+vitamin E
HCT 116	5FU	3.8 (\pm 0.21)	<u>1.5</u> (\pm 0.29)	<u>1.7</u> (\pm 0.20)
	Doxorubicin	0.32 (\pm 0.07)	<u>0.09</u> (\pm 0.08)	<u>0.13</u> (\pm 0.05)
HCT 15	5FU	11.4 (\pm 0.11)	<u>1.01</u> (\pm 0.09)	<u>1.4</u> (\pm 0.10)
	Doxorubicin	1.51 (\pm 0.07)	<u>0.11</u> (\pm 0.05)	<u>0.17</u> (\pm 0.04)

^aThe concentration of 5-FU or doxorubicin required to reduce soft agar colony formation by 50% (\pm s.e.m.). Underscored: significantly different from -antioxidant group ($P < 0.01$), as determined by analysis of variance with multiple comparison adjustment.

Figure 2A

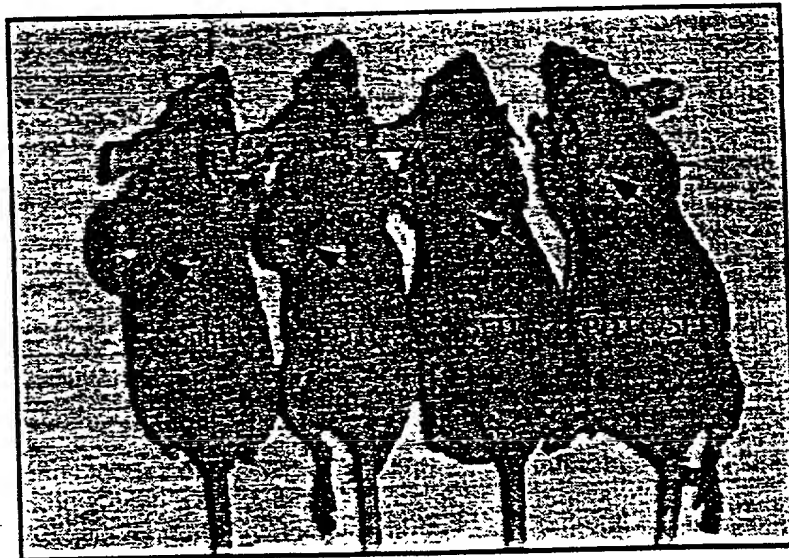
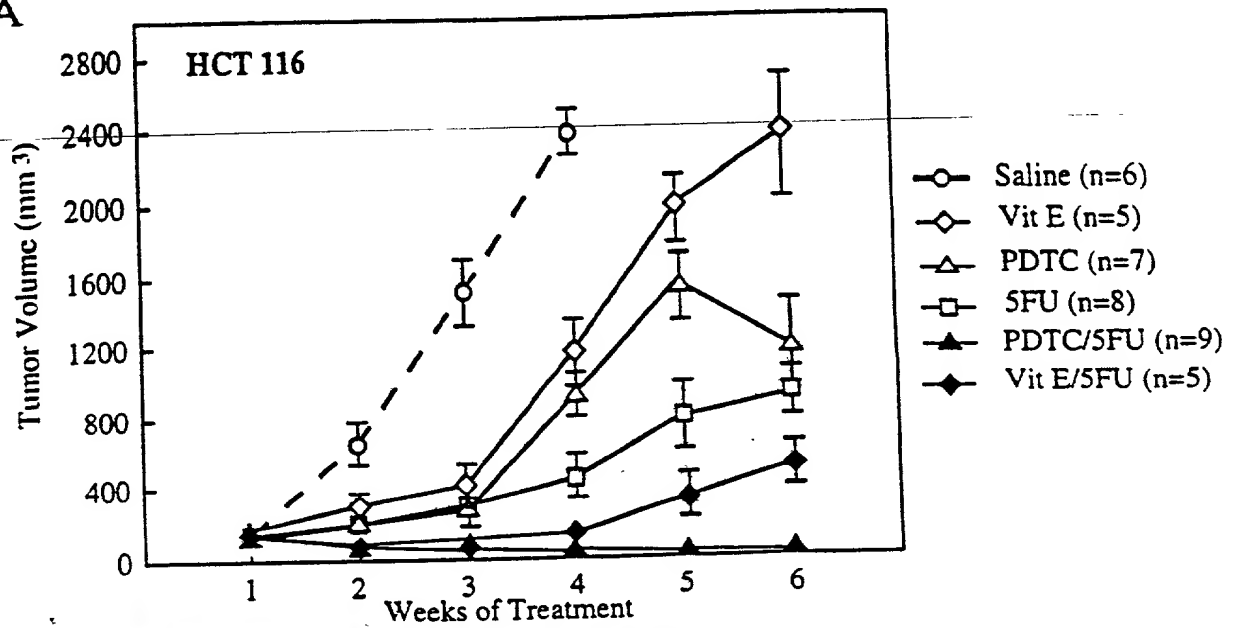


Figure 2B

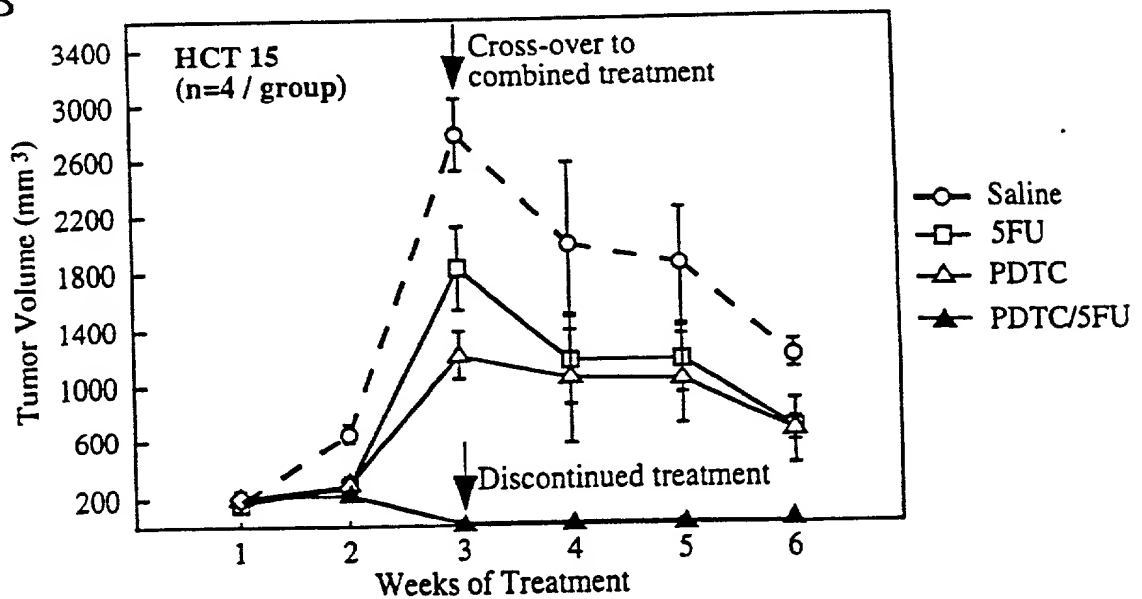


Figure 3A Western blot

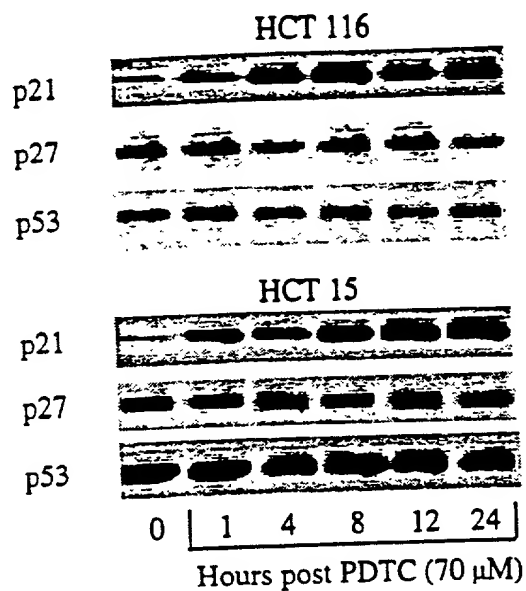


Figure 3B Northern blot

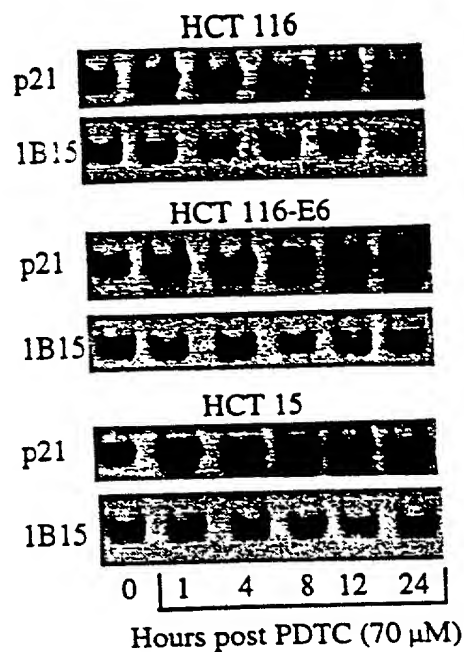
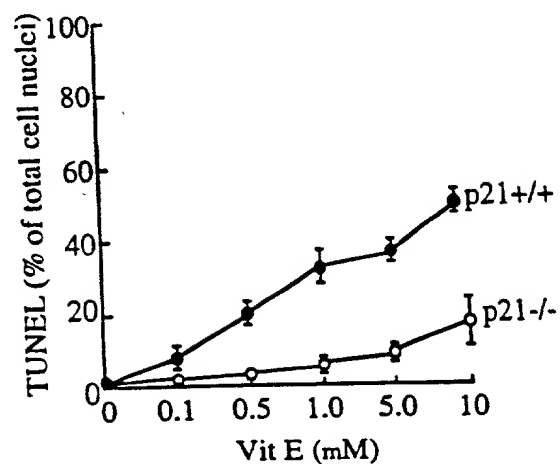
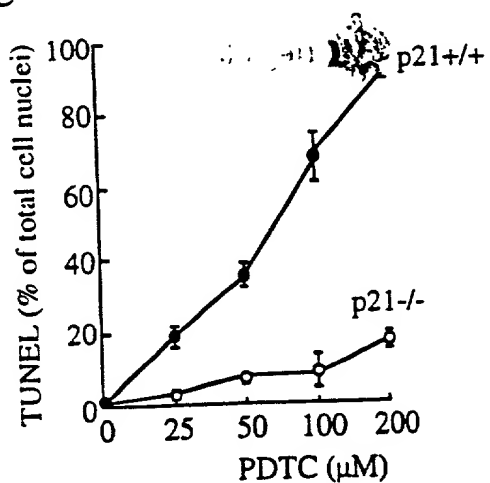


Figure 3C



Parameter	Unit	Value	Standard Error	95% CI	P-value
Intercept		1.00	0.00	1.00	0.00
Age	Year	0.02	0.01	-0.01, 0.05	0.15
Gender					
Male		0.01	0.01	-0.01, 0.03	0.45
Female		-0.01	0.01	-0.03, 0.01	0.45
Education	Year	0.01	0.01	-0.01, 0.03	0.35
Income	Year	0.01	0.01	-0.01, 0.03	0.35
Health status					
Good		0.01	0.01	-0.01, 0.03	0.45
Poor		-0.01	0.01	-0.03, 0.01	0.45
Smoking status					
Smoker		0.01	0.01	-0.01, 0.03	0.45
Nonsmoker		-0.01	0.01	-0.03, 0.01	0.45
Alcohol consumption					
Drinker		0.01	0.01	-0.01, 0.03	0.45
Nondrinker		-0.01	0.01	-0.03, 0.01	0.45
Exercise					
Regular		0.01	0.01	-0.01, 0.03	0.45
Irregular		-0.01	0.01	-0.03, 0.01	0.45
Stress					
High		0.01	0.01	-0.01, 0.03	0.45
Low		-0.01	0.01	-0.03, 0.01	0.45
Family size					
Large		0.01	0.01	-0.01, 0.03	0.45
Small		-0.01	0.01	-0.03, 0.01	0.45
Marital status					
Married		0.01	0.01	-0.01, 0.03	0.45
Single		-0.01	0.01	-0.03, 0.01	0.45
Divorced		0.01	0.01	-0.01, 0.03	0.45
Widowed		-0.01	0.01	-0.03, 0.01	0.45
Religion					
Christian		0.01	0.01	-0.01, 0.03	0.45
Muslim		-0.01	0.01	-0.03, 0.01	0.45
Hindu		0.01	0.01	-0.01, 0.03	0.45
Buddhist		-0.01	0.01	-0.03, 0.01	0.45
Other		0.01	0.01	-0.01, 0.03	0.45
Occupation					
Professional		0.01	0.01	-0.01, 0.03	0.45
Managerial		-0.01	0.01	-0.03, 0.01	0.45
Clerical		0.01	0.01	-0.01, 0.03	0.45
Skilled		-0.01	0.01	-0.03, 0.01	0.45
Unskilled		0.01	0.01	-0.01, 0.03	0.45
Residence					
Urban		0.01	0.01	-0.01, 0.03	0.45
Rural		-0.01	0.01	-0.03, 0.01	0.45
Climate					
Tropical		0.01	0.01	-0.01, 0.03	0.45
Temperate		-0.01	0.01	-0.03, 0.01	0.45
Polar		0.01	0.01	-0.01, 0.03	0.45
Subtropical		-0.01	0.01	-0.03, 0.01	0.45
Continental		0.01	0.01	-0.01, 0.03	0.45
Mediterranean		-0.01	0.01	-0.03, 0.01	0.45
Desert		0.01	0.01	-0.01, 0.03	0.45
Oceanic		-0.01	0.01	-0.03, 0.01	0.45
Highland		0.01	0.01	-0.01, 0.03	0.45
Lowland		-0.01	0.01	-0.03, 0.01	0.45
Mountain		0.01	0.01	-0.01, 0.03	0.45
Plateau		-0.01	0.01	-0.03, 0.01	0.45
Valley		0.01	0.01	-0.01, 0.03	0.45
Coastal		-0.01	0.01	-0.03, 0.01	0.45
Inland		0.01	0.01	-0.01, 0.03	0.45
Island		-0.01	0.01	-0.03, 0.01	0.45
Peninsula		0.01	0.01	-0.01, 0.03	0.45
Bay		-0.01	0.01	-0.03, 0.01	0.45
Strait		0.01			

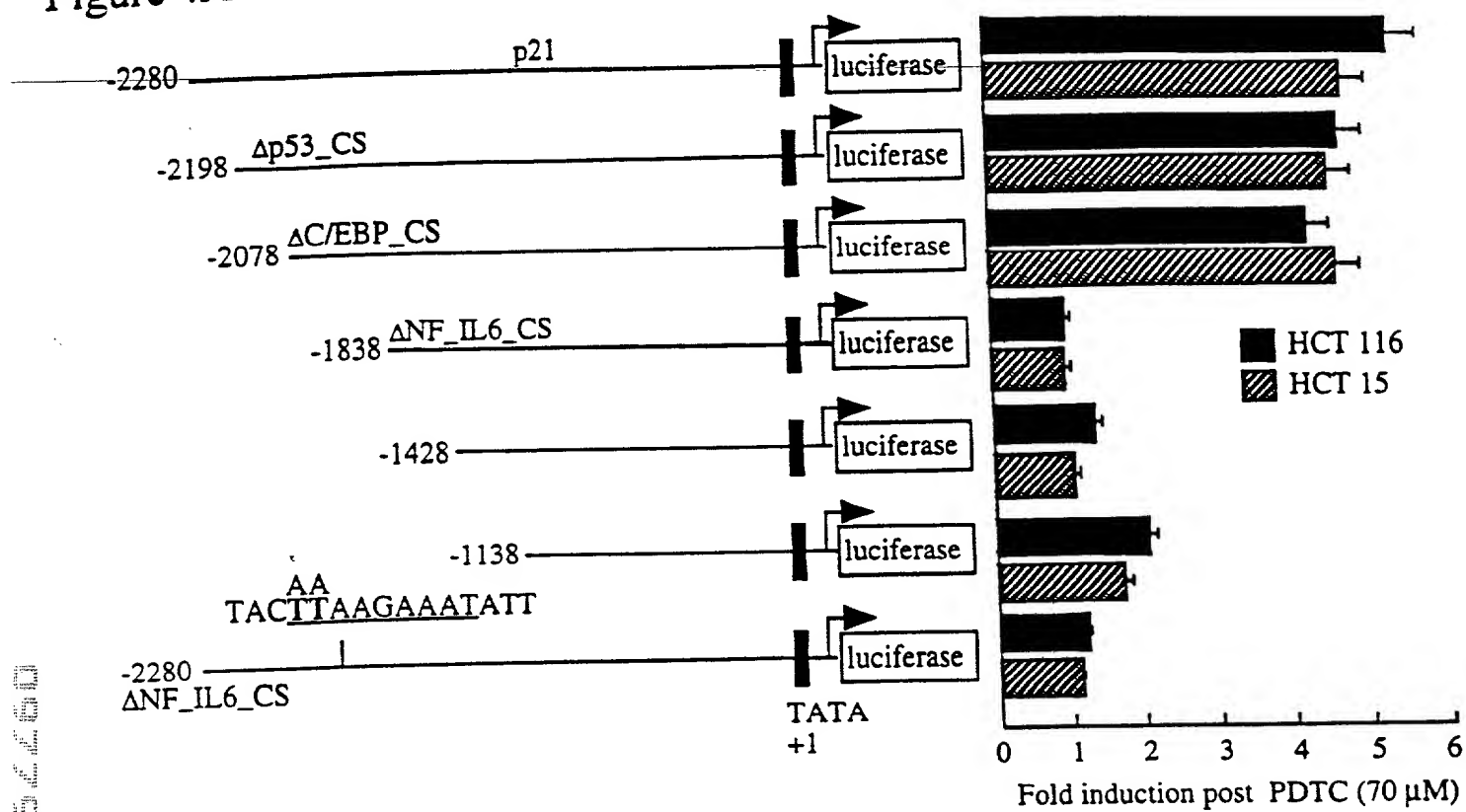


Figure 4B

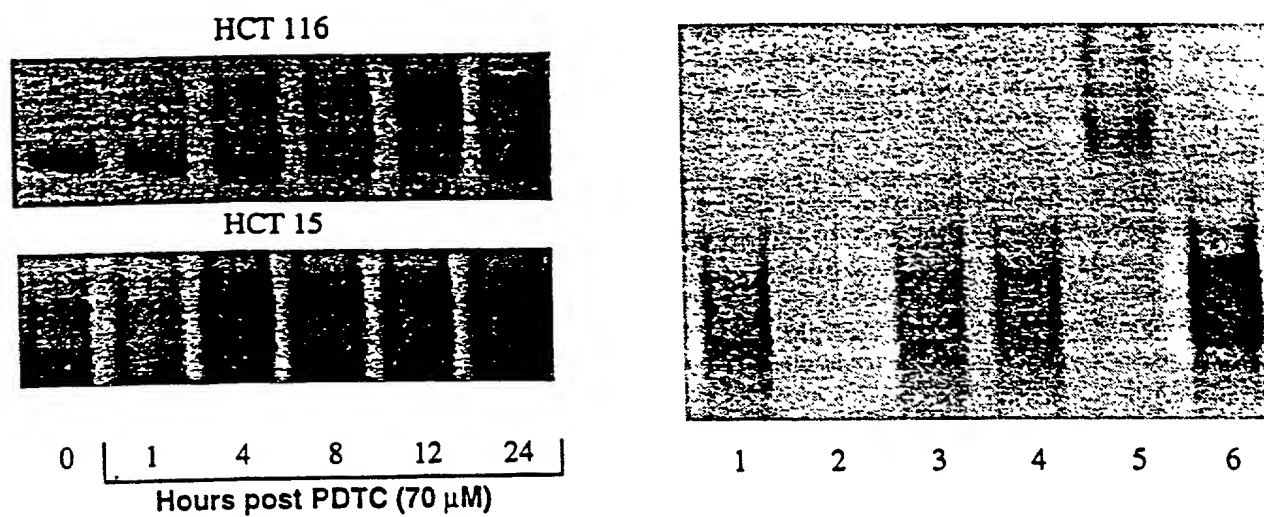


Figure 4C

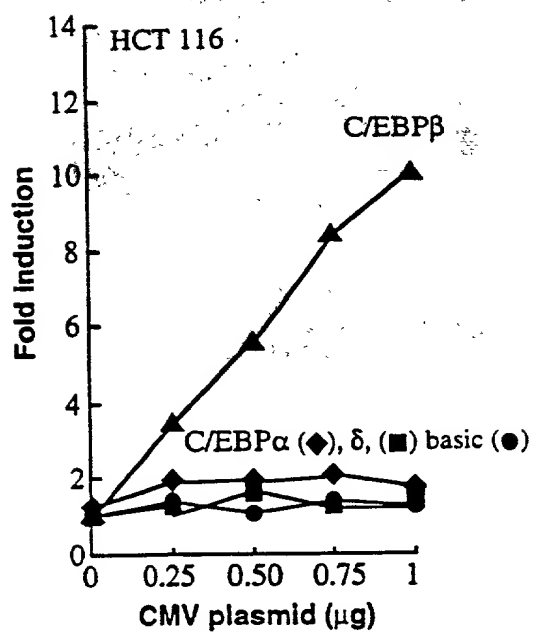
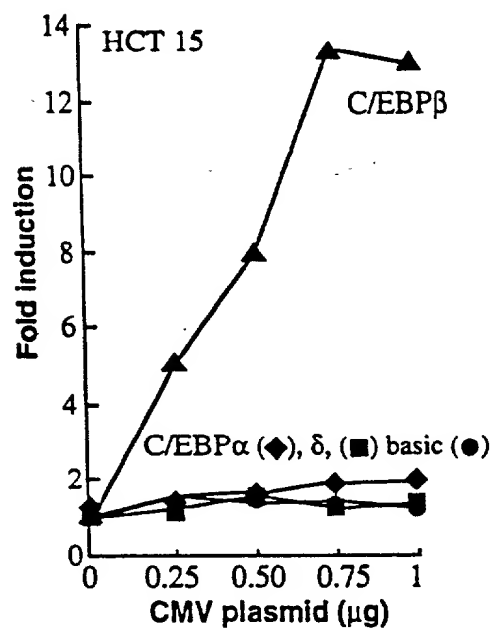


Figure 4D



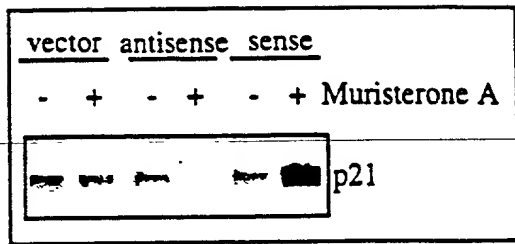


Figure 4E

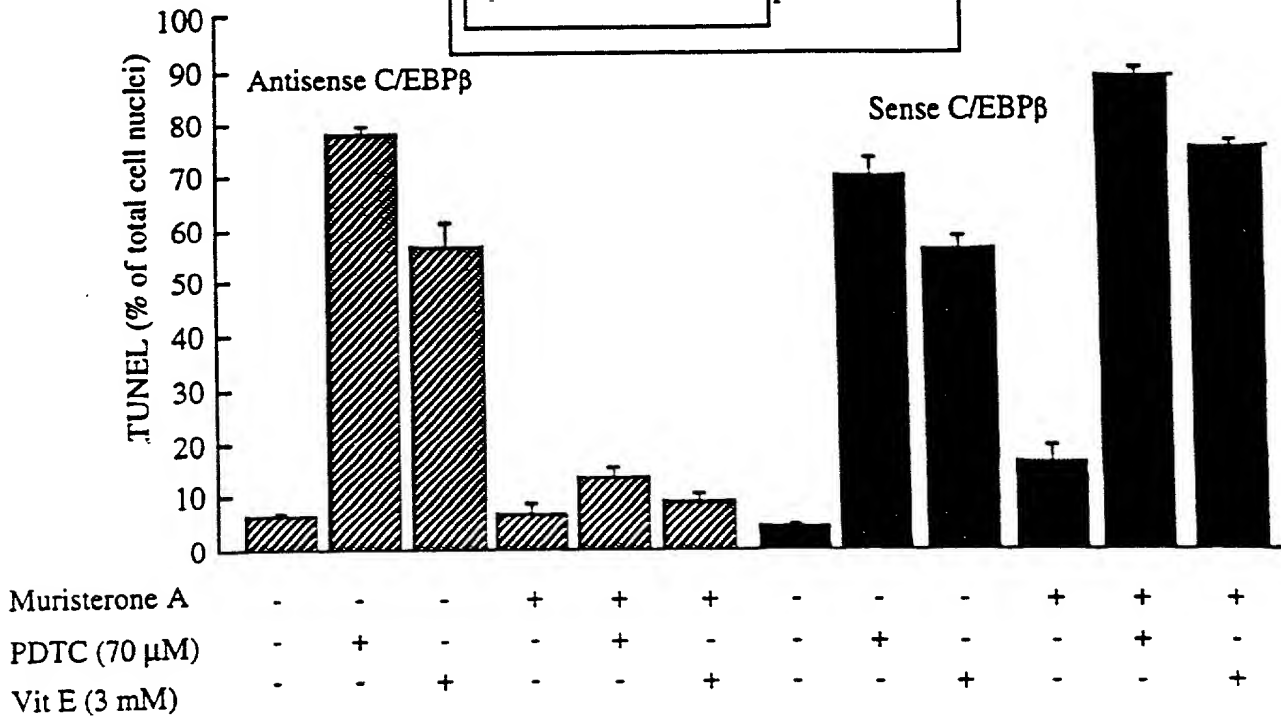
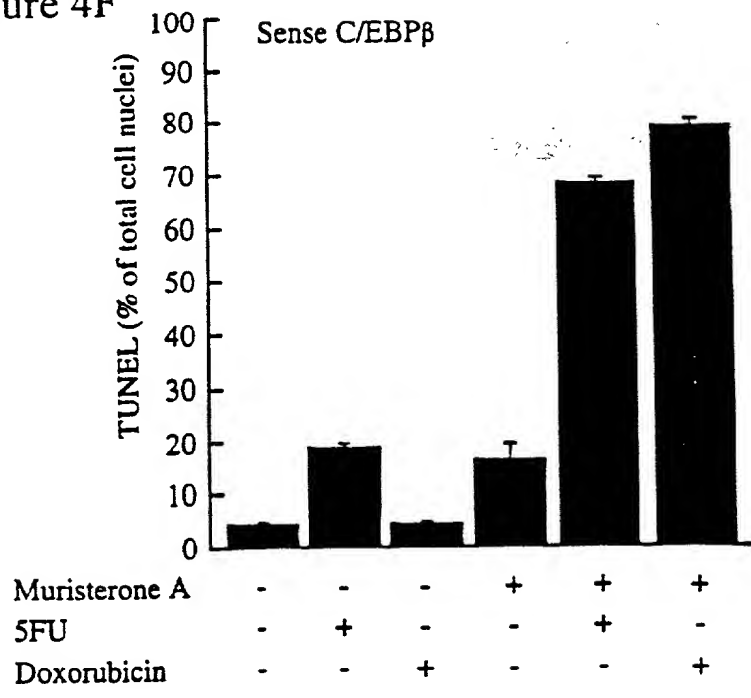


Figure 4F



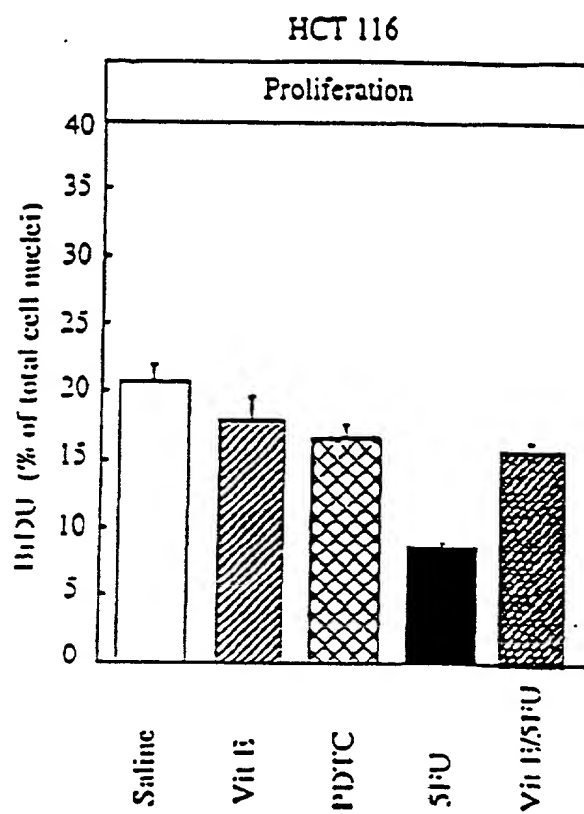


Figure 5A

0070094 00000000

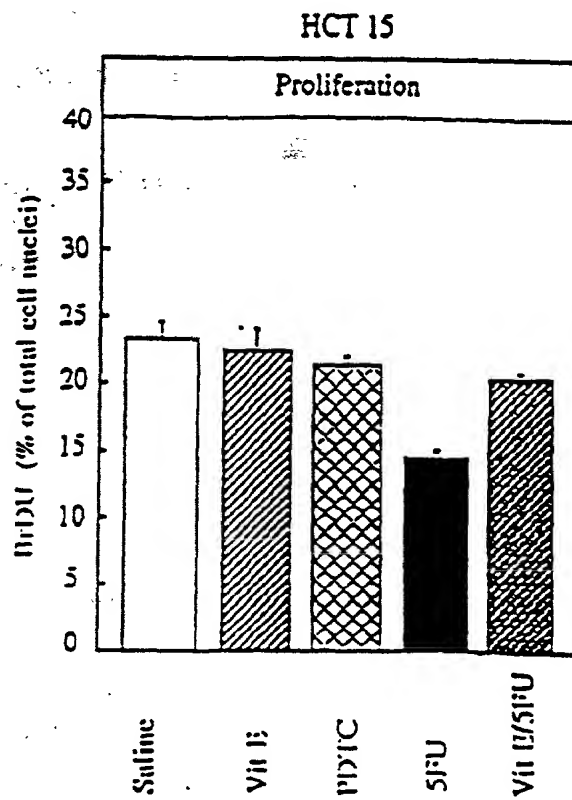


FIGURE 5B

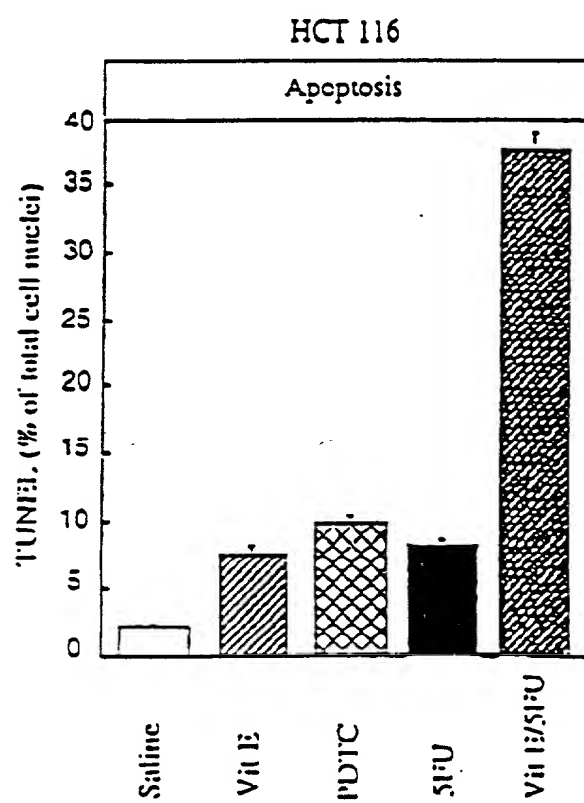


FIGURE 6A

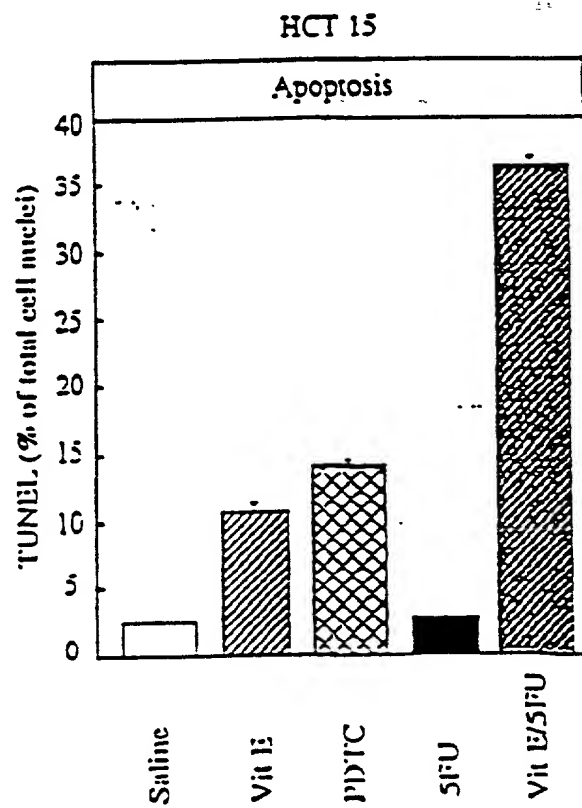


FIGURE 6B

09779086 020704

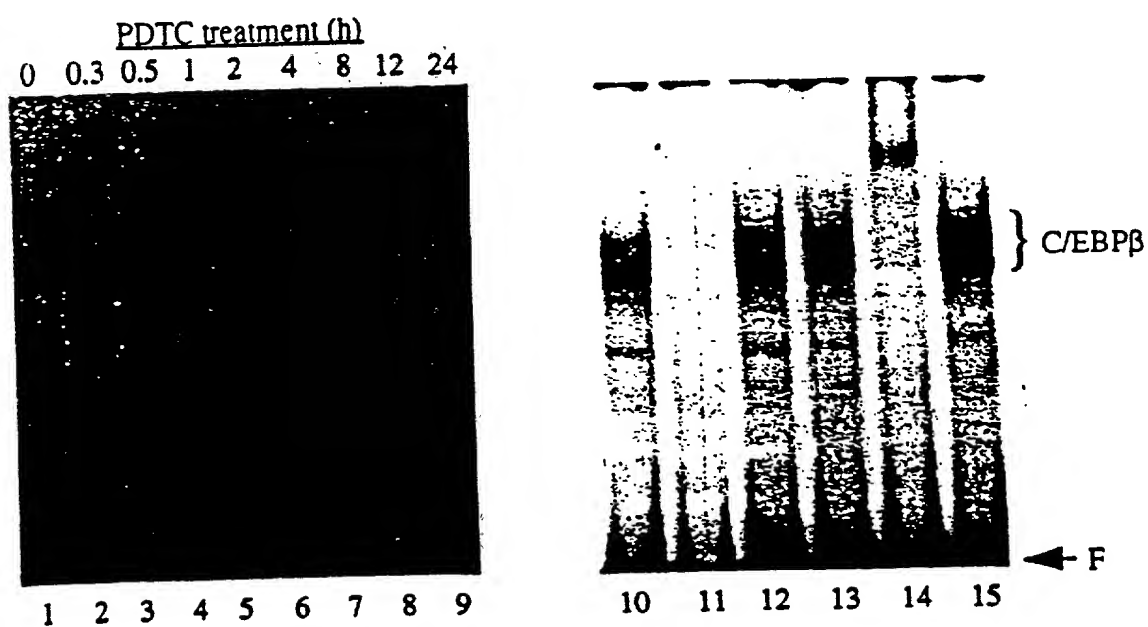


Figure 7A

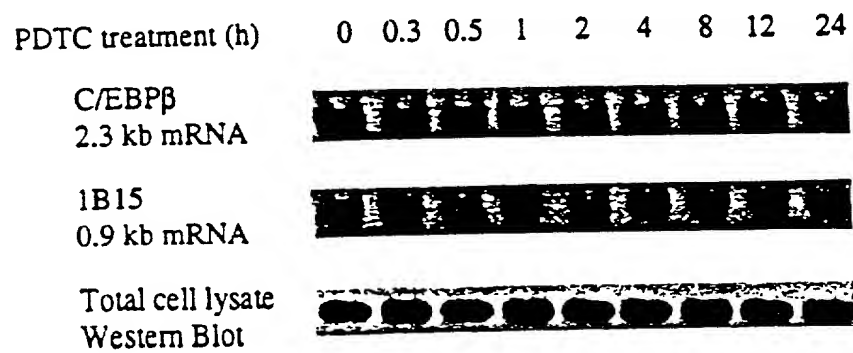


Figure 7B

03779084 0306260

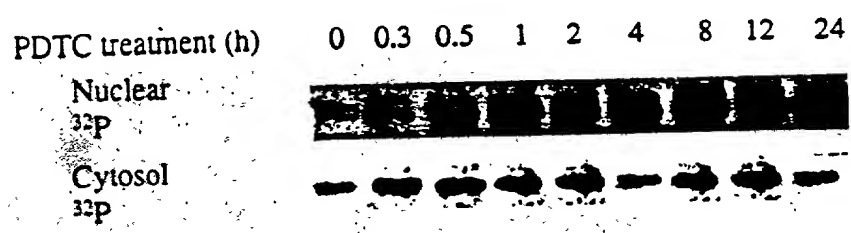
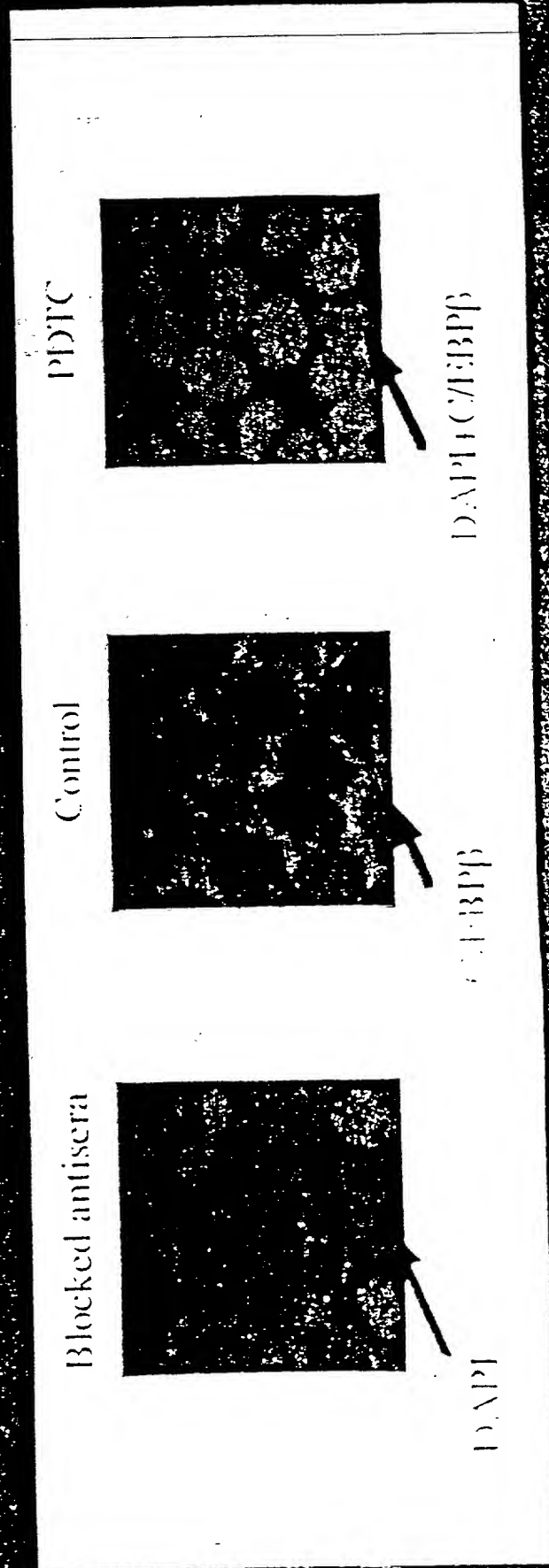


Figure 7C

Figure 7D

PDTC Treatment results in Nuclear Translocation of C/EBP β



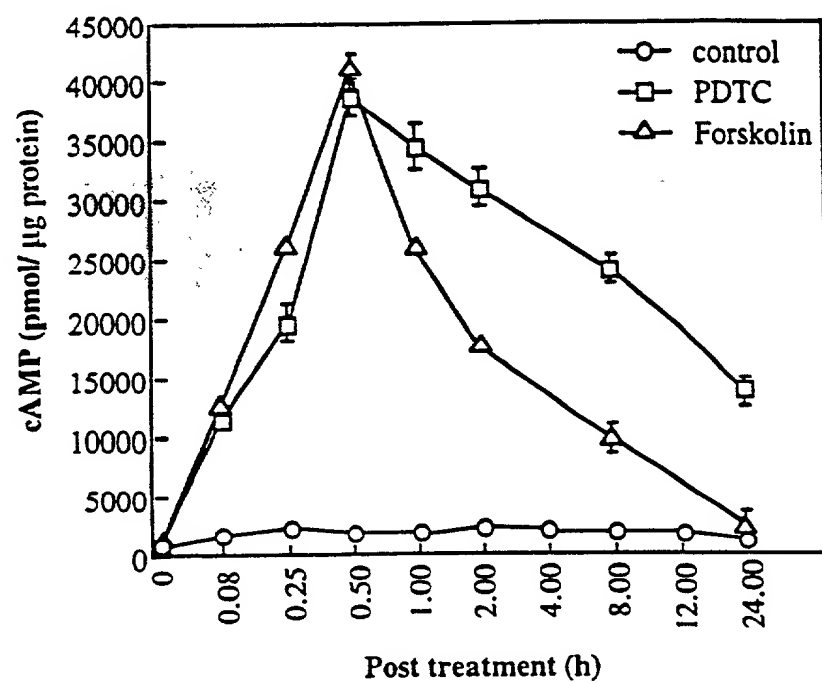


FIGURE 8A

102020 9806250

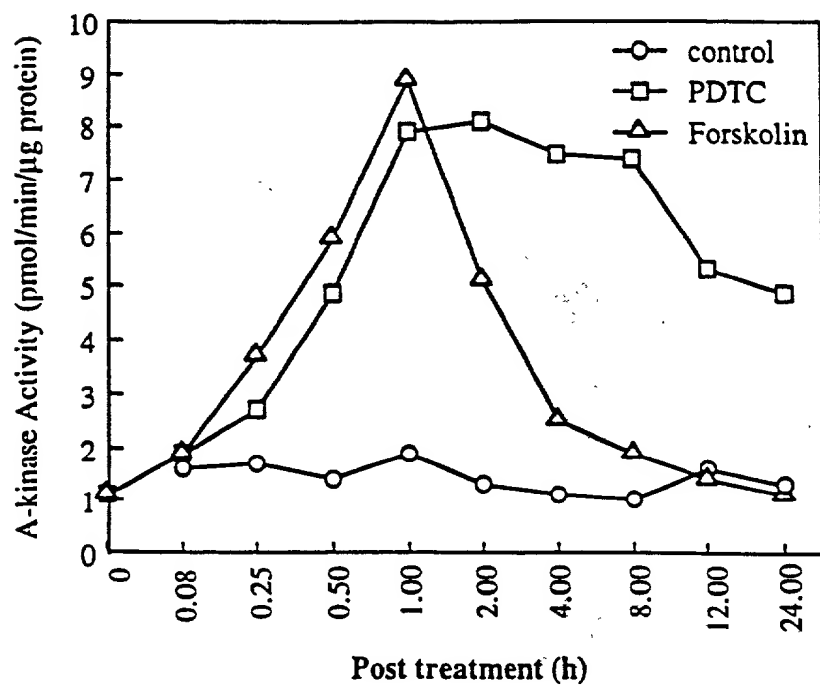


FIGURE 8B

Figure 9A

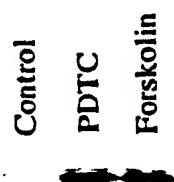


Figure 9B Trypsin cleavage

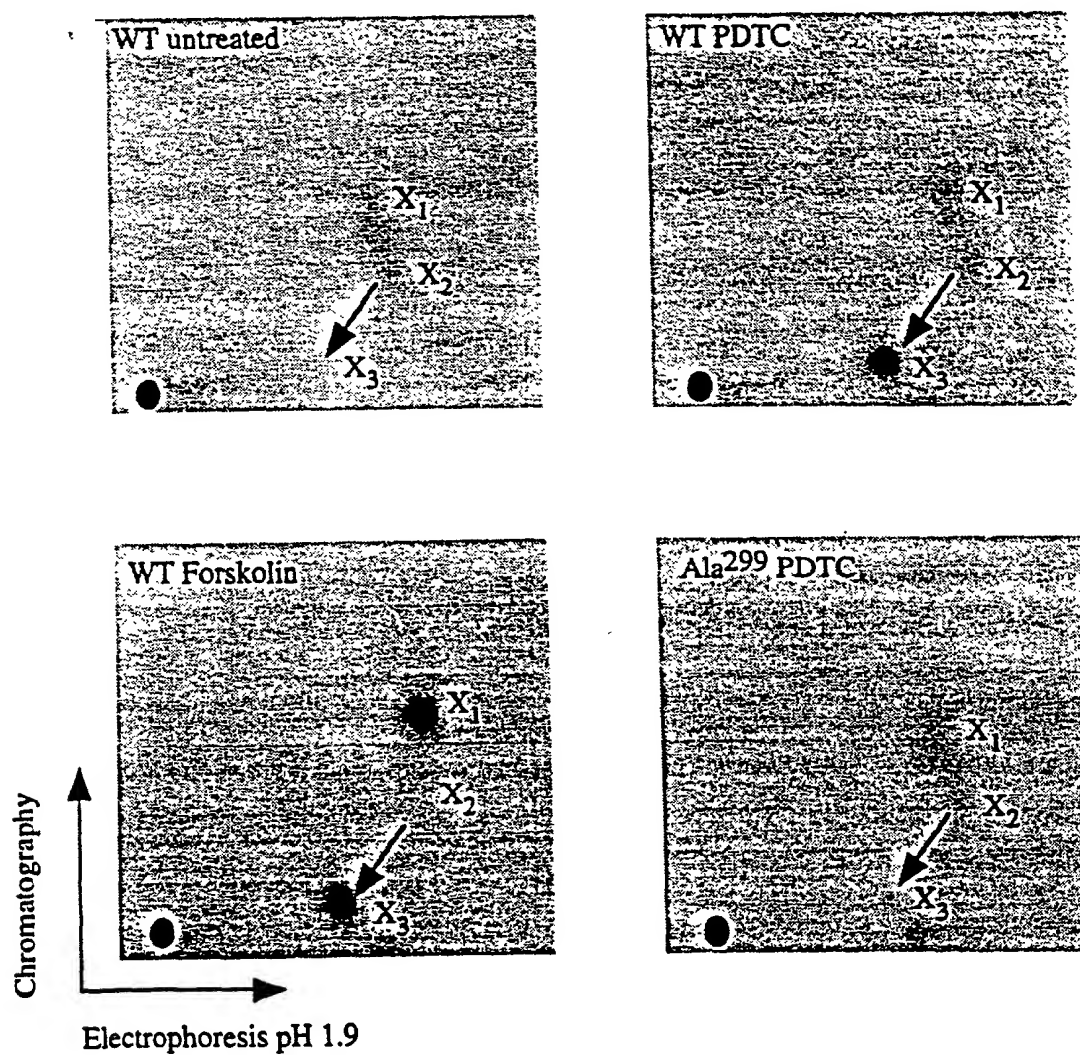


Figure 9C

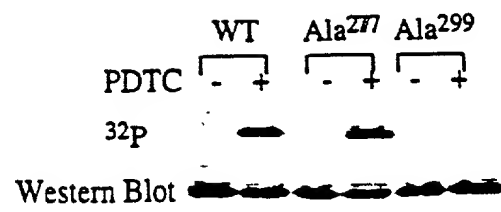


Figure 10A

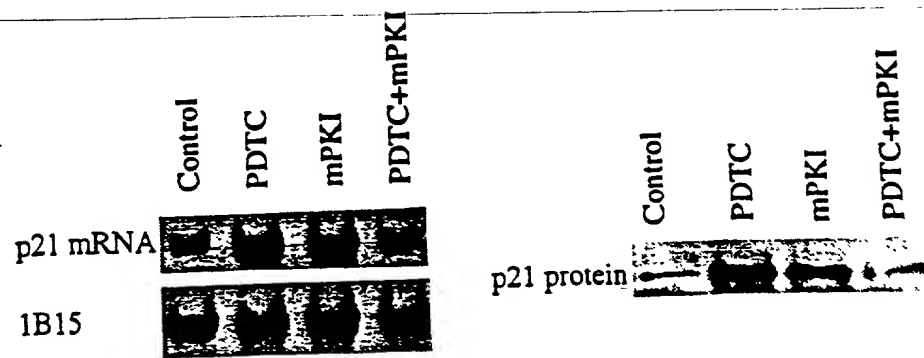
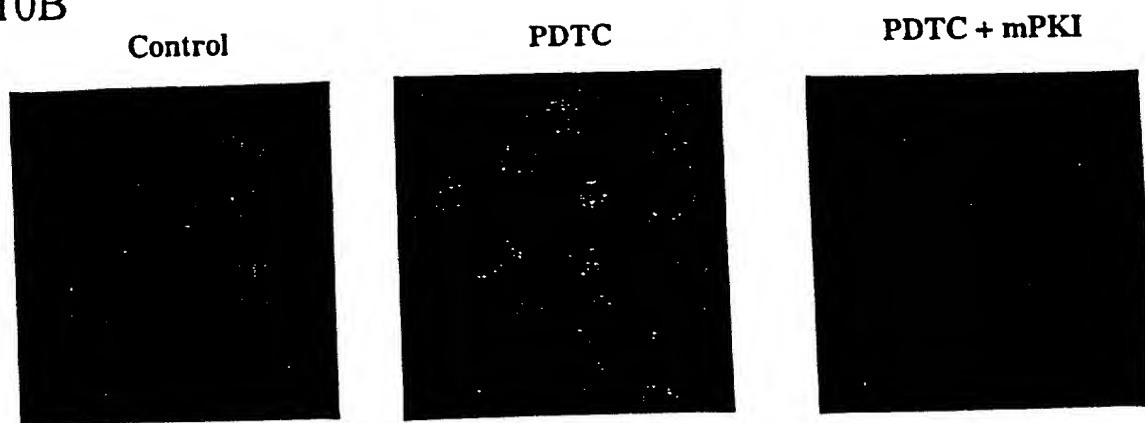


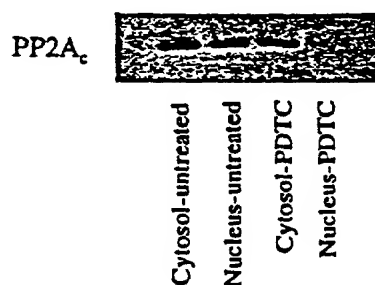
Figure 10B



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T02020 98052260

FIGURE 11

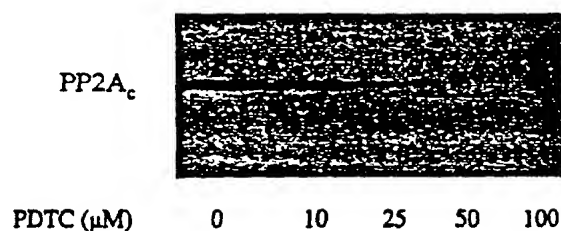
Carboxymethylation of PP2Ac is Inhibited by Antioxidants



DKO-1 cells were incubated in serum-containing media containing [methyl-³H]S-adenosyl methionine and/or 70μM PDTC for 3 hours. Cytosolic or nuclear fractions were prepared and C/EBPβ immunoprecipitated using standard methods. Antibody/antigen complexes were resolved by SDS-PAGE and the presence of PP2Ac was detected by fluorography (overnight).

FIGURE 12

Antioxidants Inhibit Methyltransferase Activity Against PP2Ac



PP2A_{AC} was incubated in the presence of [methyl-³H]S-adenosyl methionine, increasing concentrations of PDTC and partially purified rat methyltransferase for 30 min at 37C. The reaction was terminated by the addition of SDS-sample buffer. Samples were resolved by SDS-PAGE and the presence of methylated PP2A dimers visualized by fluorography.

PDTC Inhibits PP2A, but not PP1, Activity

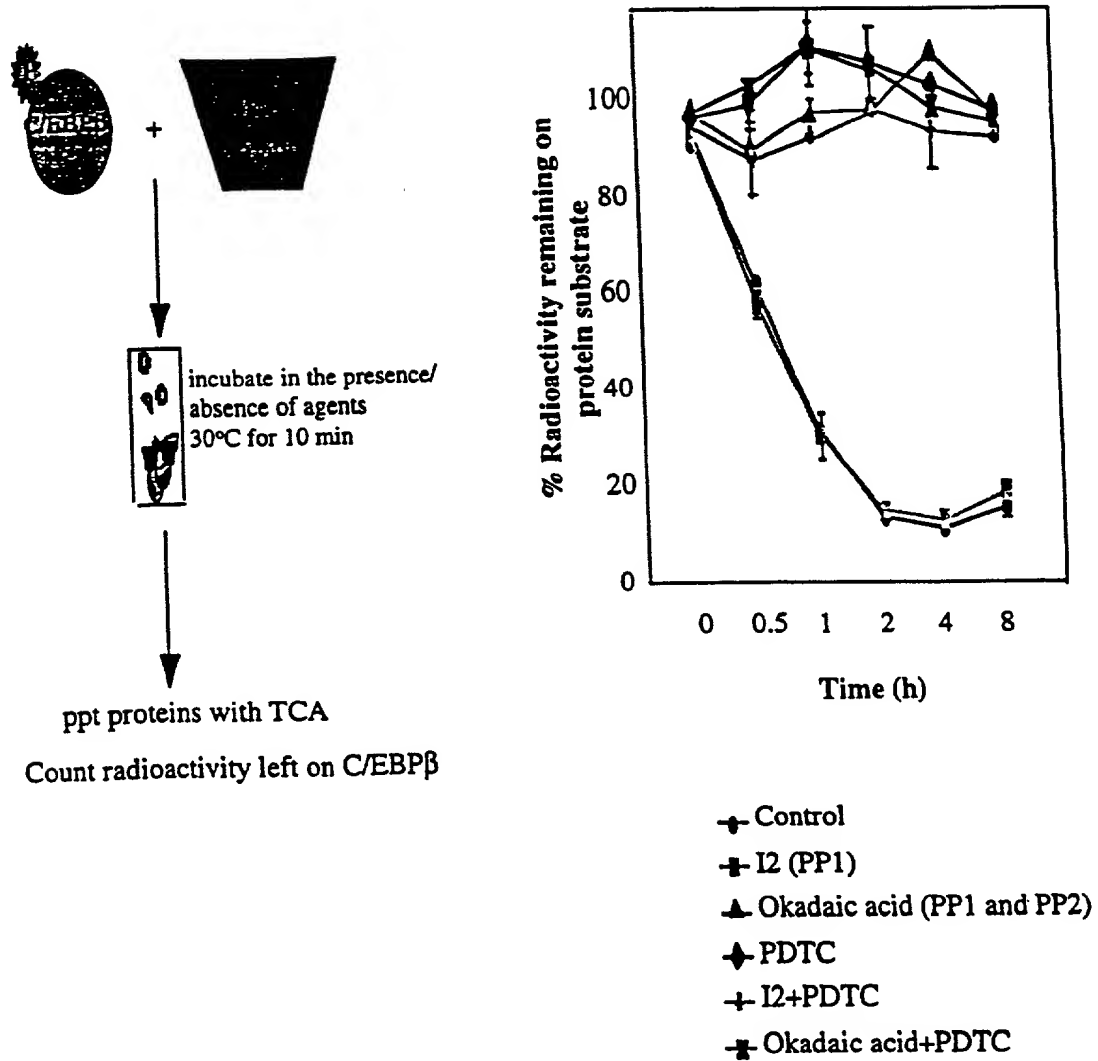


Figure 13

Figure 14 - C/EBP β and PP2Ac are components of isolated Methyltransferase activity

